

~~DECLASSIFIED~~ SECRET

6

HEMLIG  
se sid 1

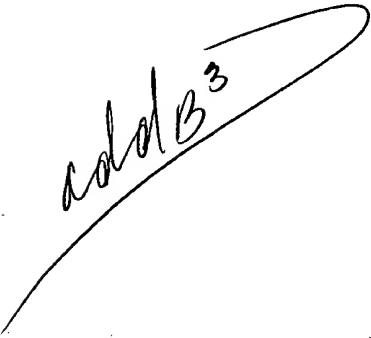
Claims:

1. A decoy for deceiving radar systems, especially Doppler radar systems, characterised in that it comprises a corner reflector where at least one of the surfaces (1) is adapted to be able to obtain a varying reflectivity for radar radiation, especially with a modulation frequency which in the reflected radiation causes Doppler sidebands of an extent that is usual for the radar application.
2. The decoy as claimed in claim 1, characterised in that the modulation frequency is adapted to be variable.
3. The decoy as claimed in claim 2, characterised in that the modulation frequency is adapted to be randomly variable.
4. The decoy as claimed in any one of preceding claims, characterised in that the surface (1), whose reflectivity can vary, comprises a non-reflecting surface provided with a check pattern of lines arranged so close together that, if they are electrically interconnected in the crossing points, the check pattern reflects the incident radar radiation, and that each crossing point of the check network is provided with a switching element which alternately can electrically connect the lines and electrically disconnect the same.
5. The decoy as claimed in claim 4, characterised in that the switching element comprises four diodes (5) in a diode bridge conducting current from one conductor to three other conductors, and that the check pattern of lines is adapted to be supplied with a square wave voltage between two opposite sides, viz. between the side from which direction the diode bridge conducts current and the opposite side of the check pattern of lines.
6. The decoy as claimed in any one of the preceding claims, characterised in that, especially for use as air-borne decoy for protecting the aircraft, all surfaces are made of a flexible, foldable material, and that the decoy in the storage state is folded before being put into use.
7. The decoy as claimed in claim 6, characterised in that the permanently reflecting surfaces (2) comprise a reflecting foil and the surface or surfaces (1) having a variable reflection comprise a line-etched dielectric, where the diode bridges are arranged in the crossing points of the lines.

~~DECLASSIFIED~~ SECRET

~~SECRET~~~~DECOY~~ INTELLIGENCE AGENCY

- a 2 8. The decoy as claimed in claim 6 or 7 characterised in that it is enclosed by a flexible closed casing (7) of the balloon type and provided with an inflation device, which in operation transforms it from the storage state to the state of operation.
- 5 2 9. The decoy as claimed in claim 8, characterised in that the inflation device uses a light inert gas, such as helium, which gives an extended time of function in its action as an air-borne decoy.

  
add B<sup>3</sup>~~SECRET~~~~DECOY~~ INTELLIGENCE AGENCY